



Issuance Date: September 18, 2002  
Effective Date: October 1, 2002  
Expiration Date: June 30, 2007

STATE RECLAIMED WATER PERMIT NUMBER ST 6039

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
Southwest Regional Office  
and  
DEPARTMENT OF HEALTH

In compliance with the provisions of the  
State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington, as amended,  
And the  
State of Washington Reclaimed Water Use Law  
Chapter 90.46 Revised Code of Washington, as amended,  
Authorizes

**Mason County for the North Bay/Case Inlet  
Waste Water Reclamation Facility  
P.O. Box 578  
Shelton, WA 98584**

to reclaim and distribute Class A reclaimed water in accordance with the special and general conditions  
which follow.

<u>Plant Location:</u> 1001 Reclamation Ridge Road	<u>Discharge Locations:</u>	
<u>Treatment Type:</u> Activated sludge with filtration— tertiary treatment, UV disinfection, bypass and effluent storage and land application.	Facility and surface percolation & storage pond: S 19, T22N, 1W Latitude: 47° 22' 40" N Longitude: 122° 51' 42" W	Sprayfield: S25, T22N, R2W Latitude: 47° 22' 21" N Longitude: 122° 52' 16" W

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### SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
S3.A.	Discharge Monitoring Report	Monthly	
S4.C.	Wasteload Assessment	1/permit	November 15, 2005
S5.G.	Operations and Maintenance Manual	1/permit cycle	July 15, 2002
S7.C	Local Sewer Ordinance	1/permit cycle	March 1, 2005
S8.	Reclaimed Water Operating Reports	Monthly, accompanying DMRs	
S8.H.	Reclaimed Water Ordinance	1/permit cycle	October 15, 2006
S8.I.	Irrigation Use Report	1/year	November 15, 2002
S8.I	Surface Percolation Use report	1/year	November 15, 2002
G8.	Application for permit renewal	1/permit cycle	July 1, 2006

DMRs and Reclaimed Water Reports shall be submitted to the following addresses:

1. Department of Ecology, Permit Coordinator, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775
2. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4<sup>th</sup> Avenue, Spokane, Washington 99204

## SPECIAL CONDITIONS

### S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The production and use of reclaimed water must be in compliance with all specific conditions and requirements of the Washington State Reclamation and Reuse Standards, 1997, and is subject to the requirements listed below:

Beginning on the effective date and lasting through the expiration date of this permit, the Permittee is authorized to produce and distribute Class A reclaimed water to surface percolation ponds, and apply to land via spray irrigation at rates specified in the engineering report on the following designated irrigation lands:

Approximately 18.6 acres located approximately 2 miles southwest of the city of Allyn, and located in the NE¼ section 25, T. 22N, R. 2 W.WM.

Total nitrogen shall not exceed 10 mg/L. Water applied to the irrigation lands shall not normally exceed 4.6 inches per week per zone. Discharges shall be subject to the following limitations:

<u><b>EFFLUENT LIMITATIONS</b></u>			
<b>Parameter</b>	<b>Average Monthly<sup>a</sup></b> (unless otherwise noted)	<b>Average Weekly<sup>b</sup></b> (unless otherwise noted)	<b>Location</b>
<b>Flow (mgd)</b>	0.304 mgd (avg. daily) 0.608 mgd (max daily) 0.365 mgd (max monthly)		Influent
<b>Oxidized Wastewater</b>			
<b>BOD<sub>5</sub></b>	15 mg/L	22 mg/L	Final Effluent <sup>c</sup>
<b>TSS</b>	15 mg/L	22 mg/L	Final Effluent <sup>c</sup>
<b>Dissolved Oxygen</b>	Shall be measurably present in effluent		Secondary Effluent <sup>c</sup>
<b>Coagulated and Filtered Wastewater</b>			
	<b>Average Monthly<sup>a</sup></b>	<b>Sample Maximum<sup>d</sup></b>	
<b>Turbidity</b>	2 NTU	5 NTU	Prior to disinfection

<b>Disinfected-Reclaimed Water</b>			
	<b>7-day Median<sup>e</sup></b>	<b>Sample Maximum<sup>d,f</sup></b>	
<b>Total Coliform</b>	2.2 cfu/100ml	23 cfu/100mL	Final reclaimed water
<b>pH</b>	Shall not be outside the range of 6-9 standard units		Final reclaimed water
<b>Total Nitrogen as N</b>	10 mg/L (average monthly)		Final reclaimed water
<b>Lead</b>		50 mg/L	Final reclaimed water
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.			
<sup>b</sup> The average weekly effluent limitation is defined as the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.			
<sup>c</sup> The sampling point for BOD <sub>5</sub> and TSS will be the final effluent. The sampling point for DO will be the secondary effluent.			
<sup>d</sup> The sample maximum effluent limitation is defined as the highest allowable discharge.			
<sup>e</sup> The median number of total coliform organisms in the reclaimed water after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.			
<sup>f</sup> The number of total coliform organisms shall not exceed 23 per 100 milliliters in any single sample.			

<b><u>GROUND WATER LIMITATIONS</u></b>	
<b>Parameters</b>	<b>Ground Water Recharge Criteria (Sample Maximum<sup>a</sup>)</b>
Nitrate as N	10 mg/L
Nitrite as N	1 mg/L
Arsenic	10 µg/L
Cadmium	5 µg/L
Chromium	100 µg/L
Mercury	2 µg/L

<b><u>GROUND WATER LIMITATIONS</u></b>	
<b>Parameters</b>	<b>Ground Water Recharge Criteria (Sample Maximum<sup>a</sup>)</b>
Nickel	100 µg/L
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Sulfate	250 mg/L
Copper	1000 µg/L
Manganese	50 µg/L
Silver	100 µg/L
Zinc	5000 µg/L
pH	6.5 to 8.5 standard units
Iron	0.3 mg/L
Toxics	No toxics in toxic amounts
<sup>a</sup> The sample maximum is the highest allowable concentration for any sample as measured in the ground water at the top of the uppermost aquifer beneath or down gradient of the infiltration site.	

## **S2. MONITORING REQUIREMENTS**

### **A. Wastewater Monitoring**

The sampling point for the influent will take place: after the grit removal and before the Parshall flume influent meter except for the monitoring of the influent flow which will be at the Parshall flume.

The sampling point for the effluent (from the above ground treatment works) will take place: prior to discharging into the infiltration basins and the sprayfields.

Monitoring requirements for ground water follow the requirements for effluent.

The Permittee shall monitor the wastewater according to the following schedule:

<b>Parameter</b>	<b>Sample Point (each point shown is an individual sample)</b>	<b>Sampling Frequency</b>	<b>Sample Type</b>
Flow (mgd)	Influent	Continuous <sup>(e)</sup>	Recording meter
	Filter bypass flowmeter	Continuous <sup>(e)</sup>	Recording meter

Parameter	Sample Point (each point shown is an individual sample)	Sampling Frequency	Sample Type
	Effluent (prior to filters)	Continuous <sup>(e)</sup>	Recording meter
	Sprayfield pump station	Continuous <sup>(e)</sup>	Recording meter
BOD <sub>5</sub> (mg/L)	Influent	1/week	24 hr-Composite
	Final Effluent <sup>(b)</sup>	1/week	24 hr-Composite
TSS (mg/L)	Influent	1/week	24 hr-Composite
	Final Effluent <sup>(b)</sup>	1/week	24 hr-Composite
pH (Standard Units)	Influent	Daily	Grab <sup>(d)</sup>
	Final Effluent <sup>(b)</sup>	Daily	Grab <sup>(d)</sup>
Dissolved Oxygen (mg/L)	Influent	Daily	Grab <sup>(d)</sup>
	Secondary Effluent <sup>(b)</sup>	Daily	Grab <sup>(d)</sup>
TKN (mg/L as N)	Influent	1/week	24 hr-Composite
Total Nitrogen (mg/L)	Influent	1/week	24 hr-Composite
	Final Effluent <sup>(b)</sup>	1/week	24 hr-Composite
NO <sub>3</sub> (mg/L as N)	Final Effluent <sup>(b)</sup>	1/week	24 hr-Composite
Ammonia (mg/L as N)	Influent	1/week	24 hr-Composite
	Effluent	1/week	24 hr-Composite
Total Coliform (Org./100 ml)	Final Effluent <sup>(b)</sup>	Daily	Grab <sup>(a)(g)</sup>
Coagulant (lbs/day)	Coagulant feed	Daily	Measurement
Coagulant Aid (lbs/day)	Coagulant feed	Daily	Measurement
Turbidity (NTU) <sup>(f)</sup>	Filter influent	Daily	Grab <sup>(a)</sup>
	Filter effluent	Continuous <sup>(e)</sup>	Recording meter
Priority Pollutant Analysis (µg/L)	Influent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
	Effluent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
Copper (µg/L)	Influent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
	Effluent	2/permit cycle <sup>(c)</sup>	24 hr-Composite



Parameter	Sample Point (each point shown is an individual sample)	Sampling Frequency	Sample Type
Mercury (µg/L)	Influent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
	Effluent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
Cadmium (µg/L)	Influent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
	Effluent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
Lead (µg/L)	Influent	2/permit cycle <sup>(c)</sup>	24 hr-Composite
	Effluent	Quarterly <sup>(h)</sup>	24 hr-Composite
<sup>(a)</sup> Grab samples shall be taken at the same time daily when wastewater characteristics are the most demanding on the treatment facilities and disinfection processes.			
<sup>(b)</sup> Final reclaimed water samples must be taken after UV disinfection.			
<sup>(c)</sup> The required analysis of the priority pollutants and above listed metals must be taken in the 4 <sup>th</sup> quarter of 2002 and the 1 <sup>st</sup> quarter of 2004.			
<sup>(d)</sup> The grab sample for pH shall be twice a day on week days and once a day on weekends and holidays.			
<sup>(e)</sup> Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken daily when continuous monitoring is not possible. Turbidity samples shall be taken once every four hours when continuous monitoring is not available.			
<sup>(f)</sup> Filter effluent turbidity analysis shall be performed by a continuous recording turbidimeter and shall be read and recorded at least every four hours. The maximum turbidity level reported should be the maximum level recorded during the day. See S.8.B.			
<sup>(g)</sup> As an alternate method, total coliform bacteria may be monitored using the ONPUG-MUG test (also called Autoanalysis Colilert System) per the latest edition of the Standard Methods.			
<sup>(h)</sup> Quarterly is defined as: 1 <sup>st</sup> —January 1 to March 31 2 <sup>nd</sup> —April 1 to June 30 3 <sup>rd</sup> —July 1 to September 30 4 <sup>th</sup> --October 1 to December 31			

## B. Ground Water Monitoring

The sampling point for the reclaimed water after entering the ground will be from monitoring wells 1 through 5, and any additional wells that may be added at a later date. This monitoring includes background monitoring for the same parameters. Monitoring in the down gradient wells should begin in the first winter before the sprayfield is put to full use, providing there is water in the wells.

The Permittee shall monitor the groundwater/percolate according to the following schedule:

Parameter	Sampling Frequency	Sample Type
Static water level (nearest 0.01 feet)	Quarterly	Field measurement
Temperature (°C)	Quarterly <sup>(a)</sup>	Field measurement
Conductivity (µmho/cm)	Quarterly <sup>(a)</sup>	Field measurement
Dissolved Oxygen	Quarterly <sup>(a)</sup>	Field measurement
pH (standard units)	Quarterly <sup>(a)</sup>	Grab
Nitrate as mg/L N	Quarterly <sup>(a)</sup>	Grab
Nitrite as mg/L N	Quarterly <sup>(a)</sup>	Grab
Arsenic (µg/L)	Quarterly <sup>(a)</sup>	Grab
Cadmium (µg/L)	Quarterly <sup>(a)</sup>	Grab
Chromium (µg/L)	Quarterly <sup>(a)</sup>	Grab
Mercury (µg/L)	Quarterly <sup>(a)</sup>	Grab
Nickel (µg/L)	Quarterly <sup>(a)</sup>	Grab
Total Coliform (CFU/100 ml)	Quarterly <sup>(a)</sup>	Grab
Total Dissolved Solids (mg/L)	Quarterly <sup>(a)</sup>	Grab
Chloride (mg/L)	Quarterly <sup>(a)</sup>	Grab
Sulfate (mg/L)	Quarterly <sup>(a)</sup>	Grab
Copper (µg/L)	Quarterly <sup>(a)</sup>	Grab
Lead (µg/L)	Quarterly <sup>(a)</sup>	Grab
Manganese (µg/L)	Quarterly <sup>(a)</sup>	Grab
Silver (µg/L)	Quarterly <sup>(a)</sup>	Grab
Zinc (µg/L)	Quarterly <sup>(a)</sup>	Grab
(a) Quarterly is defined as: 1 <sup>st</sup> —January 1 to March 31 2 <sup>nd</sup> —April 1 to June 30 3 <sup>rd</sup> —July 1 to September 30 4 <sup>th</sup> --October 1 to December 31		

C. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including

representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions affecting effluent quality.

Ground water sampling shall conform to the latest protocols in the *Implementation Guidance for the Ground Water Quality Standards*, (Ecology 1996).

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

Any soil analysis and reporting will be in accordance with *Laboratory Procedures*, Soil Testing Laboratory, Washington State University, November 1981.

Sludge monitoring requirements specified in this permit shall be conducted according to test procedures specified in 40 CFR Part 503.

D. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

E. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 Washington Administrative Code (WAC). Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited.

**S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department,

and be received no later than the 15th day of the month following the completed reporting period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than 45 days following the reporting period. The first report is due by **Reserved for 30 days after issuance date**. The reports shall be sent to:

1. The Department of Ecology, Water Quality Permit Administrator, P.O. Box 47775, Olympia, Washington 98504-7775.
2. The Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, 1500 West 4<sup>th</sup> Avenue, Spokane, Washington 99204.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

The Permittee shall retain all records pertaining to the monitoring of sludge for a minimum of five years.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;

2. Repeat sampling and analysis of any violation and submit the results to the Department within 30 days after becoming aware of the violation;
3. Immediately notify the Department of the failure to comply; and
4. Submit a detailed written report to the Department within 30 days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the resampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

#### **S4. FACILITY LOADING**

##### **A. Design Criteria**

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

Daily average flow:	0.304 mgd
Average flow for the maximum month:	0.365 mgd
BOD <sub>5</sub> loading for maximum month:	715 lbs/day
TSS loading for maximum month:	715 lbs/day

##### **B. Plans for Maintaining Adequate Capacity**

When the actual flow or wasteload reaches 85 percent of any one of the design criteria in S4.A for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee shall submit to the Department, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet this objective.

1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
3. Limitation on future sewer extensions or connections or additional wasteloads.
4. Modification or expansion of facilities necessary to accommodate increased flow or wasteload.

5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or wasteload.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. Wasteload Assessment

The Permittee shall conduct an assessment of their flow and waste load once during this permit cycle and submit a report to the Department by November 15, 2005. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

**S5. OPERATION AND MAINTENANCE**

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

A. Certified Operator

An operator certified for at least a Class III plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class II plant shall be in charge during all regularly scheduled shifts.

B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the

Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The Permittee shall maintain Reliability standards established in S.8.C.

E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. Bypass Procedures

The Permittee shall immediately notify the Department of any spill, overflow, or bypass from any portion of the collection or treatment system.

Bypass to the reclaimed water use area is prohibited except as included in Condition S.8., Reclaimed Water Use.

The bypass of wastes from any portion of the collection or treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

1. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass (See S8.A.).

If the resulting bypass from any portion of the treatment system results in noncompliance with this permit the Permittee shall notify the Department in accordance with Condition S3.E "Noncompliance Notification."

2. Anticipated Bypass That Has the Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department will consider the following prior to issuing an administrative order:
  - a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.

- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under Revised Code of Washington (RCW) 90.48.120.

- 3. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

G. Operations and Maintenance Manual

An Operations and Maintenance (O&M) Manual shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Department for approval once per permit cycle and is due by July 15, 2002. The O&M Manual shall be reviewed by the Permittee at least annually. The Permittee shall confirm the review by letter and/or a manual update to the Department. All manual changes or updates shall be submitted to the Department whenever they are incorporated into the manual. The approved operation and maintenance manual shall be kept available at the treatment plant.

The operation and maintenance manual shall contain the treatment plant process control monitoring schedule. All operators shall follow the instructions and procedures of this manual.

The manual shall include:

- 1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure;
- 2. Irrigation system operational controls and procedures;
- 3. Protocols and procedures for ground water monitoring network sampling and testing;
- 4. Plant maintenance procedures;
- 5. Alarm condition response plan to ensure that no untreated or inadequately treated wastewater will be delivered to the reclaimed water use areas.



6. Discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing on the cross-connection control devices.
7. Operational control strategies for reclaimed water use areas.

H. Irrigation Land Application

1. There shall be no runoff of reclaimed water applied to land by spray irrigation to any surface waters of the state or to any land not owned by or under control of the Permittee.
2. The Permittee shall use recognized good practices, and all available and reasonable procedures to control odors from the land application system. When notified by the Department, the Permittee shall implement measures to reduce odors to a reasonable minimum.
3. The reclaimed water shall not be applied to the irrigation lands in quantities that:
  - a. Significantly reduce or destroy the long-term infiltration rate of the soil.
  - b. Cause long-term anaerobic conditions in the soil.
  - c. Cause ponding of reclaimed water and produce objectionable odors or support insects or vectors.
  - d. Cause leaching losses of constituents of concern beyond the treatment zone or in excess of the approved design. Constituents of concern are constituents in the reclaimed water, partial decomposition products, or soil constituents that would alter ground water quality in amounts that would affect current and future beneficial uses.
4. The Permittee shall maintain all irrigation agreements for lands not owned for the duration of the permit cycle. Any reduction in irrigation lands by termination of any irrigation agreements may result in permit modification or revocation. The Permittee shall immediately inform the Department in writing of any proposed changes to existing agreements.

**S6. RESIDUAL SOLIDS**

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

**S7. PRETREATMENT**

The Permittee shall work cooperatively with the Department to ensure that all commercial and industrial users of the wastewater treatment system are in compliance with pretreatment regulations.

A. Discharge Authorization Required

Significant commercial or industrial operations shall not be allowed to discharge wastes to the Permittee's sewerage system until they have received prior authorization from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended. The Permittee shall immediately notify the Department of any proposed new sources of wastewater from significant commercial or industrial operations.

B. Prohibitions

A non-domestic discharger may not introduce into the Permittee's sewerage system any pollutant(s) that cause pass through or interference.

The following non-domestic discharges shall not be discharged into the Permittee's sewerage system.

1. Pollutants that create a fire or explosion hazard in the domestic wastewater facilities (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).
2. Pollutants that will cause corrosive structural damage to the domestic wastewater facilities, but in no case discharges with pH lower than 5.0 standard units or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
3. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
4. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
5. Heat in amounts that will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities such that the temperature at the POTW exceeds 40°C (104°F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.
6. Petroleum oil, non-biodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
8. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.

9. As provided by WAC 173-303-071(3)(a), discharges of dangerous wastes into the sewerage system by industrial or commercial users are prohibited unless the discharger has submitted an application for a state waste discharge permit. The applicant must accurately describe the wastewater on a State Waste Discharge Permit Application for Industrial Discharges to a POTW (Ecology Form 040-177).
10. Noncontact cooling water in significant volumes.
11. Stormwater, and other direct inflow sources.
12. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

C. Local Sewer Ordinance

The Permittee shall submit the sewer ordinance that details the prohibitions listed in part B above to the Department for review by March 1, 2005.

**S8. RECLAIMED WATER USE**

A. Bypass Prohibited

There shall be no bypassing of untreated or partially treated wastewater from the reclamation plant or any intermediate unit processes to the distribution system or point of use at any time. All reclaimed water being distributed for beneficial use must meet Class A requirements at all times. Water not meeting Class A must be retained for additional treatment. Substandard wastewater shall not be discharged to the reclaimed water distribution system or for other uses without specific written approval from the Departments of Health and Ecology.

The use of the short term reclaimed water bypass lagoon shall be reported promptly by phone or e-mail with a follow up written communication as part of the monthly discharge monitoring report submitted to both the Departments of Ecology and Health.

B. Instrumentation Calibration

Monitoring devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with the manufacturer's recommendations. The Permittee shall verify the accuracy of the on-line turbidimeters at a minimum frequency of at least once every two weeks. Calibration records shall be maintained for at least three years.

C. Reliability

The Permittee shall maintain Reliability Class I (EPA 430-99-74-001) plus the reliability requirements defined in the facility plan and in the Water Reclamation and Reuse Standards, which require the following reliability features:

1. Alarms and standby power source
2. Alarms and automatically actuated short-term (24-hour) storage or disposal provisions.
3. Automatically actuated long-term storage or disposal provisions for treated wastewater.

D. Reclaimed Water Operational Records

1. Operating records shall be maintained at the reclamation treatment plant and at a central depository within the Permittee's operating agency. These shall include: records of all analyses performed; records of operational problems, unit process and equipment breakdowns, and diversions to emergency storage or disposal; and all corrective or preventative action taken.
2. Process or equipment failures triggering an alarm shall be recorded and maintained as a separate record file. The recorded information shall include the time and cause of failure and corrective action taken.
3. A monthly summary of operating records as specified above shall be submitted with the Discharge Monitoring Report form to The Departments of Ecology and Health at that address listed below.
4. If the reclamation facility was not operating during a given monitoring period, submit the required reports with the words 'no discharge' entered in place of the monitoring results.
5. Reclaimed water reports shall be submitted monthly accompanying the DMRs and sent to the following addresses:
  - a. Department of Ecology, Municipal Permit Administrator, Southwest Regional Office P.O. Box 47600, Olympia, Washington 98504-7600
  - b. Department of Health, Water Reclamation and Reuse Program, Division of Drinking Water, P.O. BOX 47824, Olympia, Washington 99504-7824

E. Water Reuse Plan

The Permittee shall maintain an up-to-date water reuse plan, which contains a description of the proposed water reuse system. The plan shall contain, but not be limited to, the following:

1. Description of the reuse distribution system;
2. Identification of proposed uses and reuse sites, including an evaluation of reuse sites, estimated volume of water to be reused, means of application, and for irrigation uses, the application rates, water balance, expected agronomic uptake, potential to impact ground water or surface water at the site, background water quality and hydrogeological information necessary to evaluate potential water quality impacts;

3. Alarm condition response plan to ensure that no untreated or inadequately-treated wastewater will be delivered to the use area;
4. Discussion of the cross-connection control and inspection program, including who will be responsible for compliance and testing of cross-connection control devices.
5. Operational control strategies for the reclaimed water use areas.

F. Use Area Responsibilities

1. Within 30 days of the effective date of this permit, a standard notification sign shall be developed by the Permittee using colors and verbiage approved by the state Department of Health. The signs shall be used in all reclaimed water use areas, consistent with the Water Reclamation and Reuse Standards.
2. Reclaimed water use, including runoff and spray shall be confined to the designated and approved use area.
3. The Permittee shall control industrial and toxic discharges to the sanitary sewer that may affect reclaimed water quality through either a delegated pretreatment program with the Department or assuring all applicable discharges have permits issued under the Water Pollution Control Act, Chapter 90.48 RCW, and the State Waste Discharge Permit Regulation, Chapter 173-216 WAC.
4. Where the reclaimed water production, distribution and use areas are under direct control of the Permittee, the Permittee shall maintain control and be responsible for all facilities and activities inherent to the production, distribution and use of the reclaimed water. The Permittee shall ensure that the reuse system operates as approved by the Departments of Health and Ecology.

G. Service and Use Area Agreement

Where the reclaimed water production, distribution system or use area is not under direct control of the Permittee:

1. The person(s) who produces, distributes, owns, or otherwise maintains control over the reclaimed water use area is responsible for reuse facilities and activities inherent to the production, distribution and use of the reclaimed water to ensure that the system operates as approved by the Departments of Health and Ecology.
2. Reclaimed water use, including runoff and spray, shall be confined to the designated and approved use areas.
3. A binding agreement among the parties involved is required to ensure that construction, operation, maintenance, and monitoring meet all requirements of the Departments of Health and Ecology. This agreement must be consistent with the requirements of the Water Reclamation and Reuse Standards, 1997. A copy of each service and use area agreement must be submitted for approval by the

Departments of Health and Ecology within 30 days of the effective date of this permit.

4. The service agreement shall provide the Permittee with authority to terminate service of reclaimed water to a customer violating the states Water Reclamation and Reuse Standards and restrictions outlined in the reclaimed water use agreement. The service and use area agreements shall be approved by the Departments of Health and Ecology prior to the distribution of any reclaimed water.
5. No reclaimed water shall be distributed by the Permittee without a reclaimed water service and use agreement approved by the Departments of Health and Ecology.

H. Reclaimed Water Ordinance

The Permittee shall complete a local ordinance to include policies and procedures for the distribution and delivery of reclaimed water. The ordinance shall provide the Permittee with the authority to terminate service of reclaimed water from any customer violating the state Water Reclamation and Reuse Standards and restrictions outlined in the service and use agreement. A Reclaimed Water Ordinance shall be submitted to the Department by October 15, 2006.

## **GENERAL CONDITIONS**

### **G1. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to the Department shall be signed as follows:

- A. All permit applications shall be signed by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by the person described above and is submitted to the Department at the time of authorization, and
  - 2. The authorization specifies either a named individual or any individual occupying a named position.
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

### **G2. RIGHT OF ENTRY**

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

**G3. PERMIT ACTIONS**

This permit shall be subject to modification, suspension, or termination, in whole or in part by the Department for any of the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
- C. A material change in quantity or type of waste disposal;
- D. A material change in the condition of the waters of the state; or
- E. Nonpayment of fees assessed pursuant to RCW 90.48.465.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

**G4. REPORTING A CAUSE FOR MODIFICATION**

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least 60 days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

**G5. NOTIFICATION OF NEW OR ALTERED SOURCES**

The Permittee shall submit written notice to the Department whenever any new discharge or increase in volume or change in character of an existing discharge into the sewer is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the collection or treatment system; (2) would increase the total system flow or influent waste loading by more than 10 percent; (3) is not part of an approved general sewer plan or approved plans and specifications; or would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the system's ability to adequately transport and treat the added flow and/or wasteload.

**G6. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least 180 days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

**G7. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.



**G8. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

**G9. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

**G10. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.